

Smith County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/28/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Smith County economy.¹

These 17 sectors have a total direct output of approximately **\$147.3 million** and support **536 jobs** in Smith County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Smith County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	535.6	21.91%	\$54,388,745	35.44%	\$147,258,601
Indirect Effect	119.0	4.87%	\$8,743,111	5.70%	\$18,162,701
Induced Effect	119.9	4.91%	\$7,338,925	4.78%	\$14,583,919
Total Effect	774.5	31.69%	\$70,470,781	45.92%	\$180,005,221

As shown in the above table, agriculture, food, and food processing sectors support **775 jobs**, or **31.69%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$70.5 million**, or **45.92% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **203 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Smith County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	202.9	\$36,680,821
Animal production, except cattle and poultry and eggs	146.4	\$25,346,737
Grain farming	72.1	\$39,749,191
Wholesale trade	42.6	\$8,969,272
All other crop farming	28.9	\$3,369,012
Support activities for agriculture and forestry	25.2	\$709,204
Dairy cattle and milk production	19.7	\$9,187,396
Hospitals	16.3	\$2,258,462
Animal, except poultry, slaughtering	16.2	\$10,266,038
Truck transportation	15.5	\$2,381,840

The grain farming sector directly contributes approximately **\$39.7 million** to the Smith County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	72.1	\$39,749,191
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	202.9	\$36,680,821
Animal production, except cattle and poultry and eggs	146.4	\$25,346,737
Oilseed farming	12.7	\$19,699,955
Animal, except poultry, slaughtering	16.2	\$10,266,038
Dairy cattle and milk production	19.7	\$9,187,396
Wholesale trade	42.6	\$8,969,272
All other crop farming	28.9	\$3,369,012
Owner-occupied dwellings	0.0	\$3,149,084
Truck transportation	15.5	\$2,381,840

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Smith County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	12.7	\$19,699,954.99
Grain farming	72.1	\$39,749,191.28
Vegetable and melon farming	0.5	\$120,012.36
Fruit farming	1.0	\$99,371.94
Tree nut farming	0.0	\$19.47
Greenhouse, nursery, and floriculture production	2.1	\$337,561.13
All other crop farming	28.9	\$3,369,011.64
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	202.9	\$36,680,820.47
Dairy cattle and milk production	19.7	\$9,187,396.05
Poultry and egg production	0.1	\$59,680.06
Animal production, except cattle and poultry and eggs	146.4	\$25,346,736.91
Commercial hunting and trapping	0.8	\$16,404.95
Support activities for agriculture and forestry	25.2	\$709,203.90
Animal, except poultry, slaughtering	16.2	\$10,266,037.94
Bread and bakery product, except frozen, manufacturing	2.5	\$274,504.87
Frozen cakes and other pastries manufacturing	0.1	\$21,172.07
Farm machinery and equipment manufacturing	4.3	\$1,321,520.21

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Smith County, the retail sector was omitted.